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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,822	11/24/2003	James Block	D-1183 R1+1	4746

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EXAMINER	
HESS, DANIEL A	

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/721,822	BLOCK ET AL.	
	Examiner	Art Unit	
	Daniel A. Hess	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-11* is/are allowed.

6)☒ Claim(s) *12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to 11/24/2003 filing by the applicants, which has been entered into the electronic file of record.

Specification

The abstract of the disclosure is objected to because the acronym 'XFS' appears without explanation within the abstract of what the acronym stands for. A proper way of addressing this would be to first use the full wording for what the acronym stands for prior to first use, followed by the acronym in parentheses, i.e.: eXtensions for Financial Services (XFS).

Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 1 and 9 are objected to because of the following informality: the acronym 'XFS' appears without explanation within the claim of what the acronym stands for: see claim 1, page 2, lines 3, 5, 7 and 9; see claim 9, lines 1, 3, 4 and 5. A proper way of addressing this would be to first use the full wording for what the acronym stands for prior to first use, followed by the acronym in parentheses, i.e.: eXtensions for Financial Services (XFS).

Appropriate correction is required.

Regarding claims 1 and 9, the examiner also believes some clarification would be helpful because the specification appears to refer to two kinds of extensions for financial services, namely WOSA/XFS (page 3) and J/XFS (page 4). The examiner wishes to clarify whether the term eXtensions for Financial Services (XFS) is an industry-accepted term whose meaning is understood in the industry or whether XFS is just part a trade name for standards by particular companies. If XFS is part of a trade name, then it would not belong in the claim (see MPEP 7.35.01). Instead it would have to be replaced with a description of what the XFS layer actually is.

Claim 10 is objected to because of the following informality: the acronym 'ODS' appears without explanation within the claim of what the acronym stands for: see claim 10, lines 2 and 3. If the specification lacks a clear spelling out of the acronym, as appears to be the case, then the acronym should be defined based on what it means. Appropriate correction is required.

Claim 11 is objected to because of the following informality: the acronym 'UBR' appears without explanation within the claim of what the acronym stands for: see claim 11, lines 2 and 3. . A proper way of addressing this would be to first use the full wording for what the acronym stands for prior to first use, followed by the acronym in parentheses, i.e.: unified base release (UBR). Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Shepley et al. (US 2001/0037301). Shepley et al. teaches all of the elements and means of claim 12.

Limitations of the claims are given in italics below, followed in each case by a description of how Shepley et al. meets those particular limitations.

An automated banking machine apparatus comprising:

a plurality of transaction function devices, including at least one cash dispenser;

at least one output device;

at least one computer in operative connection with each of the plurality of transaction function devices and the at least one output device;

There is (Shepley, paragraph [0031]) "Here the **ATM architecture** 20 includes an **computer 22 that is in operative connection with a plurality of transaction function devices** 42. Such transaction function devices may include for example such devices as a **note dispenser, coin dispenser**, card reader, **printer**, key pad, **display device**, function keys, depositor, cash acceptor or any other hardware device that may be operatively connected to an ATM. "

Here it is clear that the note dispenser is a cash dispenser and the printer and display are both output devices.

at least one application software component operative in the at least one computer;

In each of figures 1-3 of Shepley, an application software component, reference numerals 114, 214 and 24 respectively, can be seen in the computer. Figure 4 shows this application layer in great detail.

at least one device associated software component operative in the at least one computer;

Another word for a device associated software component is a device driver. Device drivers are employed throughout Shepley to control the individual devices of the ATM. See for example paragraphs [0017], [0018] and [0032].

at least one diagnostic software application operative in the at least one computer;

Shepley et al. teaches (paragraph [0026]):

"In another alternative embodiment of the present invention the device drivers such as the WOSA/XFS service providers or the J/XFS device services are adapted to include a **diagnostic interface**. "

wherein the at least one diagnostic software application is operative to cause the at least one computer to carry out at least one test as to whether the at least one device associated software

component and at least one transaction function device associated with the at least one device associated software component perform at least one function properly,

Shepley et al. further teaches (paragraph [0026]):

"For example a cash dispenser device driver may be adapted to include an interface for manipulating individual motors or sensors in the corresponding cash dispenser transaction function device. Such access is provided to applications independently of the XFS layer. In an exemplary embodiment, a **diagnostic application may be operatively programmed to access the diagnostic interfaces of a plurality of different device drivers. Such an exemplary diagnostic application may use the XFS layer to deactivate one or more devices from XFS communication.** Once the devices have been taken off-line with respect to the XFS components, the diagnostic application may enable a programmer or service technician to **directly access ATM hardware** through the corresponding diagnostic interface **for trouble shooting**, repair and other maintenance purposes."

Trouble shooting and maintenance are terms that essentially mean testing for proper functioning. As for testing the transaction device and the transaction device software (i.e. device driver) this is achieved because as Shepley et al. teaches, ATM hardware is accessed directly. So therefore, if there is improper functioning, it must be due to the combination of device and device software (i.e. driver), because they are accessed directly and other layers (such as the application) are bypassed and cannot be the cause of errors.

and to cause the at least one computer to provide at least one output through the at least one output device responsive to at least one result associated with the at least one test.

Shepley et al. further teaches (paragraph [0026]): "For example a cash dispenser device driver may be adapted to include an interface for **manipulating individual motors or sensors in the corresponding cash dispenser transaction function device**. ... the diagnostic application may enable a **programmer or service technician** to **directly access ATM hardware** through the corresponding diagnostic interface **for trouble shooting**, repair and other maintenance purposes."

At the very least one form of diagnostic output are the interface devices that are responsive to the tests that the service technician performs. In other words, the operation of the motors in the cash dispenser is in itself a type of output.

Allowable Subject Matter

Claims 1-11 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record teaches an ATM apparatus having many of the elements recited in claim 1. For example, it is known to have in an ATM machine a hardware layer having a plurality of function devices, a plurality of service providers as claimed, an application layer which among other things performs transaction functions including operation of the transaction function devices, an extensions for financial services layer, and a diagnostic application in the ATM operative to be used to test individual transaction devices.

Lacking in the prior art of record is an arrangement wherein the diagnostic software automatically operates to determine whether a malfunctioning ATM operation is due to a problem in the application layer or the hardware layer and then outputs the result of this determination between these two possibilities.

The nearest prior art enables an operator to test the hardware layer directly. A skilled operator could thus determine the source of the problem, but in the prior art, the ATM itself doesn't have software to make the determination.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chmielewski et al. (US 6,005,704), Zeanah et al. (US 5,993,816), Coutts (US 5,563,393) and Utsumi (US 5,974,119) all teach ATMs with certain, very limited diagnostic functions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel A Hess
Examiner
Art Unit 2876

12/02/2005